FISHLIFE

Part 12 in a series about inshore fish of Hawaii. The 12-part series is a project of the **Hawaii Fisheries Local Action Strategy**.

TOPIC MOON PHASES

Photo: NOAA

WHAT THE NATIVE HAWAIIAN MOON CALENDAR CAN TEACH US ABOUT CONSERVATION

BY SCOTT RADWAY

THERE'S A TRADITIONAL NATIVE HAWAIIAN CHANT FOR CHILDREN THAT BEGINS LIKE THIS:

KAMALI'I 'IKE 'OLE I HA HELU PO,

MUKU NEI, MUKU KA MALAMA...

The first line translates simply: "For children who do not know the moon phases." Then the chant runs through them, one by one, "Muku is here, Muku is the moon." Like school children singing the ABCs, Native Hawaiian children learned their moon phases.

Why? Because in a subsistence culture dependent on such things as healthy fish stocks, it was critical to ensure the resources remained healthy, that there was always enough fish to eat. In that system understanding moon cycles and their influence over tides and fish behavior was critical.

In other words, Native Hawaiians always knew exactly where the moon was and exactly what the fish were doing.

"The moon calendar is kind of a road map, a sort of traditional marine resource guide," says Alan Friedlander, of the Oceanic Institute, who has aided present-day Hawaiian communities working to reestablish some of the old management practices that served traditional Hawaii so well.

Friedlander explains that a core principle of Native Hawaiian management was to avoid disrupting the natural replenishment of fish. So if a fish was known to spawn during a full moon in the spring, that fish was not fished during spawning to ensure the next year, there were fish. Or if an area was known to be critical for spawning or nursery habitat, it was respected.

"Pre-European contact, Native Hawaiians had a very sophisticated management system and high level of understanding of how marine resources function," Friedlander explains. "They were out on the reef every day.

CONT. >>

OLD WAYS

An excerpt from Margaret Titcomb's book "Native use of Fish in Hawaii."

Fishing grounds were never depleted, for fishermen knew that should all the fish be taken from a special feeding spot (Ko'a) other fish would not move in to replenish the area. When such a spot was discovered it was as good luck as finding a mine and fish were fed sweet potatoes and pumpkins (after their introduction) and other vegetables so that the fish would remain and increase.

When the fish became accustomed to the good spot, frequented it constantly, and had waxed fat, then the supply was drawn upon carefully. Not only draining it completely was avoided, but also taking so many fish the rest of the fish would be alarmed. At the base of this action to conserve was the belief that the gods would have been displeased by greediness or waste.

FISHLIFE

How can traditional Native Hawaiian communities manage marine resources without written regulations?

PONO PRACTICES

Native Hawaiian resource management practices are not driven by written regulations, but by an unwritten social code reinforced by extended family and community. People do the right thing by their people, by their ancestors. Here are some of the core tenets that drive that code.

◆ ***Concern about the future generations***. Meet present food needs without compromising the ability of future generations of people to meet their needs. Irresponsible resource use is tantamount to denying future generations their means to survival.

◆ ***Self-restraint***. Take only what you need for immediate personal and family use and use what one takes carefully and fully without wasting. A good Hawaiian fisher is not the one with the largest catch but the one who can get what he or she needs without disturbing the natural processes.

◆ ***Reverence for ancestors and sacred places***. Hawaiians inherited valuable knowledge from their ancestors. At one time, that knowledge was crucial to survival. Ancestors are worshipped because the survival of Hawaiian culture depends on knowledge and skills passed from generation to generation.

◆ ***Malama***. The Hawaiian perspective is holistic, emphasizing relationships and affiliations with other living things. Accountability, nurturing and respect, important for good human relationships, are also beneficial in relationships with marine life.

◆ ***Pono behavior***. Hawaiians are expected to act properly and virtuously in relationships with past, present and future generations and with the food sources that sustain them.

Source: Kelson "Mac" Poepoe, Ho'olehua Hawaiian Homestead

Photo Courtesy of Alan Friedlander

<< CONT. FROM

It was knowledge acquired through intimacy and passed down through generations."

Today, Native Hawaiian communities throughout the state are trying to reestablish traditional practices and a traditional understanding of the natural rhythms of replenishment. One of those communities is Ho'olehua Hawaiian Homestead on Molokai, where they now manage Mo'omomi Bay and its surrounding areas by traditional measures.

To do that, the community is focusing on when fish spawn, the differences from the wet to dry seasons, and understanding, too, how the moon affects tides and changes habitat structures. For instance, at certain times of the year, sands shift and create good conditions for some fish to spawn or perhaps to harvest sea life. The result has been a series of kapu – or traditional closures – of fisheries to protect them during spawning times.

The Mo'omomi community also is mindful of fish biology, avoiding such things as fishing large male uhu during spawning seasons or throwing large moi back. For uhu, the fish spawns in harems, and if you take the one male, it could take a year for another male to emerge and a spawning season is missed. For moi, fish become females as they get larger, so if you take all the large ones, there are no females to reproduce.

Being driven by the community, Mo'omomi's management tools are contained in an unwritten code of conduct, where people recognize their shared responsibility to perpetuate the resources for each generation. Fishermen are the managers in Mo'omomi. So instead of regulations, Mo'omomi has pono practices with the core principle being to understand nature's needs to replenish itself.

"If people understand the natural rhythms, people are more apt to understand how sensitive the system is to disruption," Friedlander says. "People are more likely to use appropriate practices."

Hi'ilei Kawelo, executive director of Paepae o He'eia, He'eia Fishpond, says modern Hawaii has a lot to learn from old Hawaii in that respect. "You have to malama the place," she says. Take fish ponds. Kawelo says hundreds of years ago, Native Hawaiians recognized the need for more food in a growing population and understood the ecosystem so well, they created fish ponds to enhance the fish production by sectioning off rich coastal areas. Then during moon-driven high tides when water rushed through pond channels, they would harvest fish.

"Our kupuna were ahead of their time," says Kawelo, who was among representatives from 17 Native Hawaiian groups from around the state that gathered on Molokai recently to discuss how traditional management principles could help their communities.

Kawelo says Native Hawaiian moon calendars represent an understanding that everything is interdependent, mauka to makai, and everything people do in that system affects something else.

"It's a relationship. I don't like the words resources manager. I am part of the ecosystem. You need to coexist," Kawelo says. "That's what we can learn from our kupuna."

FishLife is produced by the **Division of Aquatic Resources** and funded by the Federal Aid in **Sport Fish Restoration Program**.